

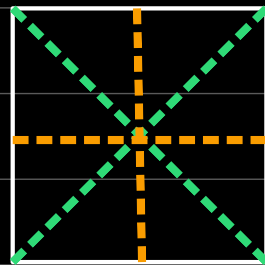
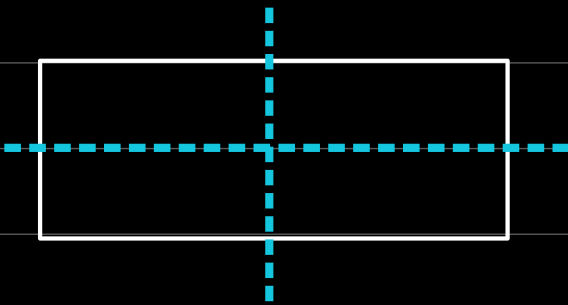
SYMMETRY

(2 Marks)

LINE
SYMMETRY
(1 Mark)

ROTATIONAL
SYMMETRY
(1 Mark)

LINE SYMMETRY



LINE THAT DIVIDES A SHAPE SUCH THAT IF WE FOLD THE PAGE ON THAT LINE BOTH HALVES OVERLAP PERFECTLY.



B

No line

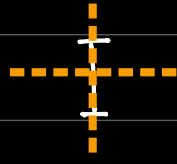
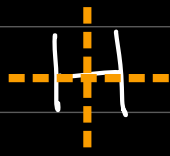


F

No Line

G

No line



J

No line

K

No line

L

No line



N

No line



if circular,
infinite lines

P

No line

Q

No line

R

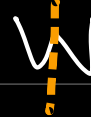
No line

S

No line



U



Y

No line



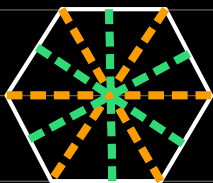
Z

No line

Regular polygons: ^{many angles} All sides and all angles equal.

For any regular polygon

No. of Sides = No of lines of symmetry.



Regular hexagon, Sides = 6

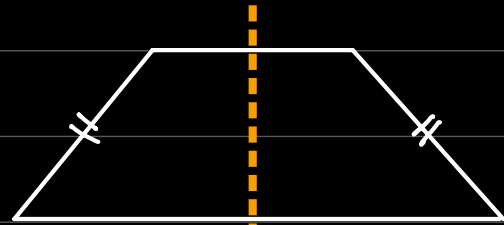
Lines of symmetry = 6

BE CAREFUL ABOUT

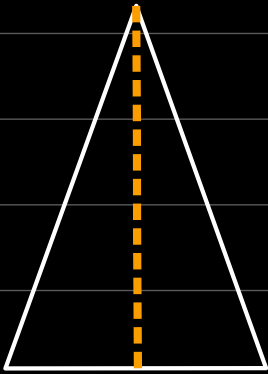
Not Regular.
Sides are not same.

No line of
symmetry.

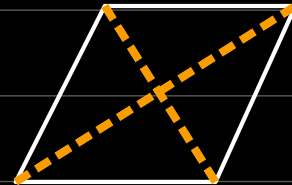
No line
of symmetry.



Isosceles Trapezium

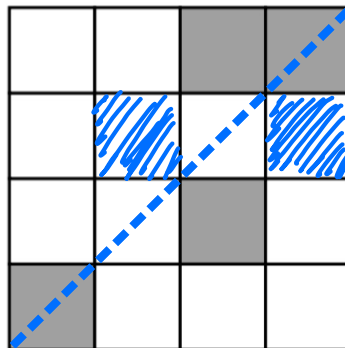


ISOSCELES TRIANGLE



RHOMBUS

- (b) On the diagram below, shade two more squares to make a pattern that has only one line of symmetry.

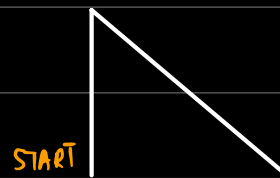
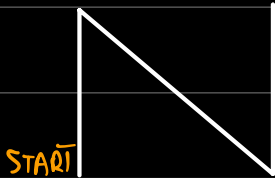


ROTATIONAL SYMMETRY

Rotate a shape 360° and count how many times you see its starting orientation.



Rotational order = 2



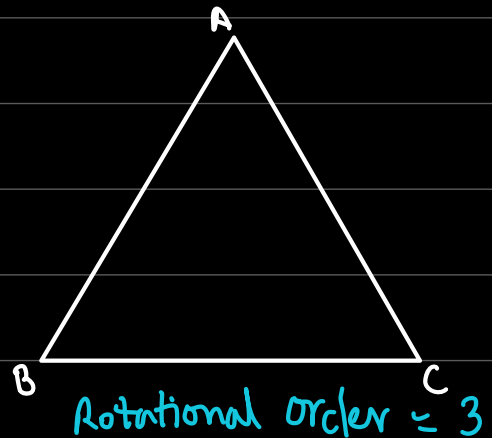
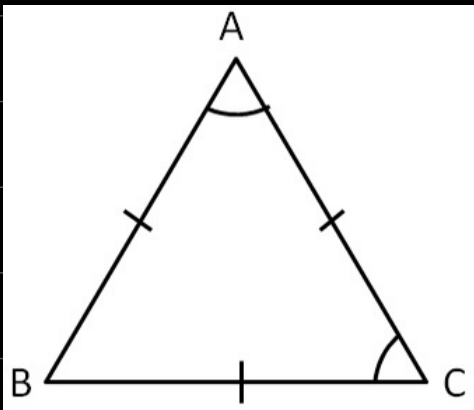
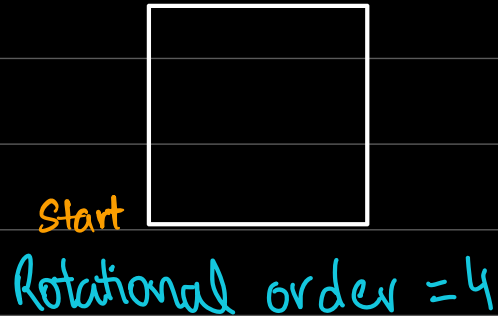
Rotational order = 2



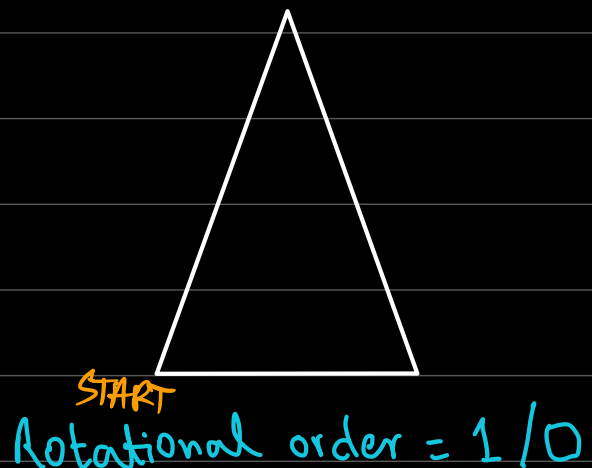
Rotational order = 2

For regular Polygon

No. of Sides = Rotational order of symmetry.



ISOSCELES TRIANGLE



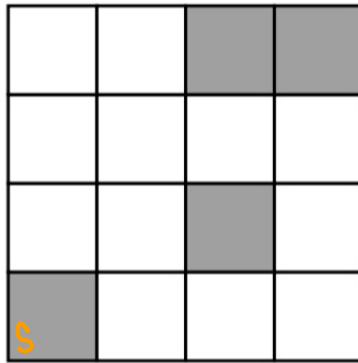
In rotational symmetry, order 1 and order 0 means the same thing.

- 6 (a) On the diagram below, shade two more squares to make a pattern that has rotational symmetry of order 2.

2 times $\rightarrow 360^\circ$

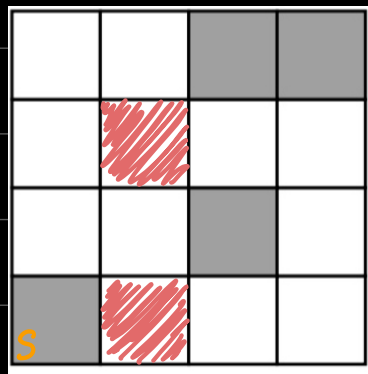
1 times $\rightarrow 180^\circ$

Rotate this shape
 180°



How much
angle to
rotate? $= \frac{360}{\text{order}}$

[1]



Lower left corner 1 Box
upper right corner 2 Box
3rd column, 2nd row 1 Box